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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,362	11/14/2001	Jun Akiyama	70904 (56693)	5592
21874 7590 12/21/2006 EDWARDS & ANGELL, LLP P.O. BOX 55874 BOSTON, MA 02205			EXAMINER POLTORAK, PIOTR	
			ART UNIT 2134	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/21/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/992,362

Applicant(s)

AKIYAMA, JUN

Examiner

Peter Poltorak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The Amendment, and remarks therein, received on 11/17/06 have been entered and carefully considered.
2. The Amendment introduces a new limitation into the originally sole independent claim 1, 11 and 16. The newly introduced limitation has required a new search and consideration of the pending claims. The new search has resulted in newly discovered prior art. New grounds of rejection based on the newly discovered prior art follow below.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

Response to Amendment

4. Applicant amendment addressed 35 USC § 112 rejection that, as a result, is withdrawn.
5. Applicant argues that Tosaki, Oshima and Bar-on do not teach "user information and encryption information recorded "in an identical kind of recording system", i.e. by the same recording scheme".

The argument has been carefully considered but was not found persuasive. The examiner points out that the limitation: "user information and encryption information recorded in an identical kind of recording system" does not limit the system to use the same recording scheme, as suggested by applicant. The examiner points out that Tosaki's disclosure clearly suggests that data has been recorded on the same medium in two different formats. Thus, it is clear that that there must be some

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components (that are part of a system) that deliver the final product (the medium with different data formats). The examiner considers these components to be the same (i.e. identical) recording system.

6. A new reference is used in the current Office Action in order to address the newly introduced limitation. As a result, the argument that Tosaki does not teach or suggests "that the encryption information is different for recording onto different disks" is moot in view of the new grounds of rejection.

7. Claims 1-9, 11-14 and 16 have been examined.

Claim Rejections - 35 USC § 103

8. Claims 1-9, 11-14 and 16 are rejected under 35 U.S.C. 103(a) as being obvious over *Tosaki et al.* (WO 00/07182) in view of *Inazawa et al* (U.S. Patent No. 6587948).

As per claims 1-2, 7-8 and 11 *Tosaki et al.* teach a disk (Fig. 1B) that comprises data area 5 (first format data recording region) and lead area 4 (second format data recording region).

Tosaki et al. teach CSS key area disposed in the lead area, which stores key information for deciphering the requisite information, which has been ciphered and recorded in the data area (col.3 lines 28-62). The requisite information is deciphered using the key information and reproduced (col. 4 lines 3-6).

This reads on "encrypted information in the data recording region in the first format and reproducing information by reading out the encrypted information recorded in

the data recording region in the first format, and by decrypting the encrypted information using the encryption information which was reproduced from the encryption data recording region in the recording medium in the second format” and on “reproducing information by reading out the encrypted information recorded in the data recording region in the first format, and by decrypting the encrypted information using the encryption information which was reproduced from the encryption data recording region in the recording medium in the second format”.

The lead-in area comprises a prepit section (*col. 3 lines 1-2*) that stores key information (*col. 2 lines 48-50*). Tosaki discloses that the recording density (line recording density, track density) is lower in the prepit section, in order to improve the quality of the signal at the prepit section.

This reads on “recording information in the data recording region in the first format, which differs from the second format in an identical kind of recording system as the encryption data recording region” and on “the first format and the second format differing from each other in at least one of recording density, error correcting system, and defect management system”.

9. *Tosaki et al.* do not teach recording identification information for identifying each recording medium and that the encryption information is different for different disks, such that the encryption information recorded on each disk is different.

Inazawa et al. disclose recording identification information (a disk key DK) for identifying each recording medium and that the encryption information is different for

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different disks, such that the encryption information recorded on each disk is different (*data encrypted by using the disc key DK, Inazawa et al., col. 6 lines 8-10*).

One of ordinary skill in the art at the time of applicant's invention would have been motivated to employ such a modification for tracking purposes and additional copyright protection.

10. As per claim 3, it is inherent that recording regions are blank before information is recorded.

11. As per claim 16, *Tosaki et al.* teach that the lead area in addition to prepit section comprise a groove (*col. 3 lines 1-3*).

12. The limitations of claim 4-5 and 12-13, and ordinary artisan would recognize that although music, movies and other data (stored in the data region that is in the first format) is subject to various compression techniques to minimize space requirement (and that the compression minimize the quality of the compressed data), it is imperative that the second format data that is used to decipher the first format data must be in perfect reproduction quality. Any discrepancies in reproduction of the encryption information (stored in the second format) would ultimately impact the usability of the decrypted information.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to ensure that the second format reproduces information with a better reproduction quality than the first format given the benefit of saving space in the first data format region while ensuring the proper (usable) reproduction of the data kept in the first format region.

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13. As per claim 6 it is inherent that plurality of information pieces are recorded in a circumferential direction on a disk and it is old and well-known practice to use more than one piece of information for the encryption process for motivation of benefit of increased security.

14. As per claims 9 and 14 *Tosaki et al.*'s invention employs two different areas with data in different formats. Data in different formats modulate differently (because they were modulated differently at the recording time) and as a result when the DVD is read, the player or a computer that reads it must have two different systems to deal with the various formats.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Gershon (U.S. Patent No. 7031470),

Oshima (EP 0802527),

Telecomworldwire-2, "JVC and Hudson Soft launch anti-copying technology for CD-ROMs", September, 2002,

Computer Reseller News, "ITIC Creating Standards to Prevent Piracy -- paving The Way For DVD Technology", pg. 113, July, 1996.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571) 272-


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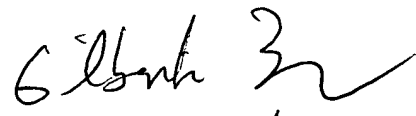
3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis Jacques can be reached on (571)272-6962. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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12/18/06



GILBERTO BARRON JR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100